



Control Number: 48785



Item Number: 99

Addendum StartPage: 0



Life's better outside.®

Commissioners

Ralph H. Duggins
Chairman
Fort Worth

S. Reed Morian
Vice-Chairman
Houston

Arch "Beaver" Aplin, III
Lake Jackson

Oliver J. Bell
Cleveland

Anna B. Galo
Laredo

Jeanne W. Latimer
San Antonio

James H. Lee
Houston

Dick Scott
Wimberley

Kelcy L. Warren
Dallas

Lee M. Bass
Chairman-Emeritus
Fort Worth

T. Dan Friedkin
Chairman-Emeritus
Houston

Carter P. Smith
Executive Director

January 11, 2018

Ms. Karen Hubbard
Public Utility Commission of Texas
P.O. Box 13326
Austin, TX 78711-3326

2019 JAN 15 AM 9:24

PUBLIC UTILITY COMMISSION
FILING CLERK

RE: PUC Docket No. 48785: Joint Application of Oncor Electric Delivery Company, LLC and AEP Texas, Inc. to Amend their Certificates of Convenience and Necessity for the Proposed Sand Lake to Solstice Double-Circuit 345-kilovolt Transmission Line Project in Pecos, Reeves, and Ward Counties, Texas

Dear Ms. Hubbard:

Texas Parks and Wildlife Department (TPWD) has received the Environmental Assessment (EA) and Alternative Routes Analysis regarding the above-referenced proposed transmission line project. TPWD offers the following comments and recommendations concerning this project.

Please be aware that a written response to a TPWD recommendation or informational comment received by a state governmental agency may be required by state law. For further guidance, see the Texas Parks and Wildlife (TPW) Code, Section 12.0011. For tracking purposes, please refer to TPWD project number 40999 in any return correspondence regarding this project.

Project Description

Oncor Electric Delivery Company, LLC (Oncor) and AEP Texas, Inc. (AEP Texas) propose to construct a double-circuit 345-kilovolt (kV) transmission line from the proposed Oncor Sand Lake Switch in Ward County and the existing AEP Texas Solstice Switch in Pecos County. The Sand Lake Switch will be located approximately 6 miles northeast of the City of Pecos on the northwest side of Farm-to-Market Road (FM) 3398. The Solstice Switch is located along the north side of Interstate Highway (IH) 10 approximately 2.5 miles east of the Pecos/Reeves County Line. The proposed transmission line project will be approximately 44.5 to 58.7 miles long, depending on which route is selected by the Public Utility Commission of Texas (PUC). For the proposed project, Oncor anticipates the use of a self-supporting, double-circuit lattice, steel towers. Oncor's and AEP Texas' typical structure heights are anticipated to be 125 and 165 feet respectively, but tower height will vary depending on terrain. The results of site-specific geotechnical and engineering studies will be used to determine the appropriate design and placement of the structures. The proposed right-of-way (ROW) width for this project will be approximately 160 feet. The ROW normally extends an equal distance on both sides of the transmission line centerline.

99

Ms. Karen Hubbard

Page 2 of 19

January 11, 2018

Additional ROW may be required at line angles, dead ends, or for terrain-related constraints.

Halff Associates, Inc. (Halff) was retained to identify and evaluate alternative routes, and to prepare an EA and Alternative Route Analysis report to support the Oncor and AEP Texas application for a Certificate of Convenience and Necessity (CCN). The EA has been prepared to provide information and address the requirements of Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code, PUC Procedural Rules Section 22.52(a)(4), PUC Substantive Rules Section 25.101, and the PUC CCN application form for a proposed transmission line.

Previous Coordination

TPWD provided information and recommendations regarding the preliminary study area for this project to Halff on August 1, 2018. This response was included in Appendix A of the EA.

Recommendation: Please review previous TPWD correspondence and consider the recommendations provided, as they remain applicable to the project as proposed.

Proposed Alternative Routes

Oncor/AEP Texas' Recommended Route

Halff professionals with expertise in different environmental disciplines (geology/soils, hydrology, terrestrial ecology, wetland ecology, and land use/aesthetics) evaluated the alternative routes based upon environmental conditions present along each route and the general routing criteria developed by Oncor, AEP Texas, and Halff. For the proposed project, Halff evaluated a total of 408 preliminary alternative routes and considered 35 routing criteria addressing factors such as land use, aesthetics, and potential environmental impacts for each of the alternative routes. Oncor and AEP Texas then evaluated the routes and selected 29 alternative routes to be filed with the CCN application. Oncor and AEP Texas selected Route 320 as the route that best meets the requirements of the Texas Utilities Code and the PUC's Substantive Rules.

The Alternative Routes Evaluation Memorandum (Attachment 12 of CCN) included the following information that contributed to Oncor and AEP Texas' selection of Route 320 as the route that best meets the requirements of the Texas Utilities Code and the PUC's Substantive Rules:

- *the length of Route 320 is approximately 44.5 miles, which is the shortest alternative route (Route 183 is the longest route included in the Application at approximately 58.7 miles);*
- *Route 320 is estimated to cost approximately \$98,220,000, which is the least expensive alternative route and is \$28,683,000 less than the most expensive alternative route (Route 183);*
- *there are no habitable structures within the proposed ROW of Route 320;*
- *there are 38 habitable structures within 500 feet of the centerline of Route 320, of which 34 of these 38 structures are mobile living or office units that are temporarily in place and appear to have no permanent foundations. The 32 mobile living units are of the travel trailer style and are located within 500 feet of Link B2's centerline. The 2 mobile office units are prefabricated mobile units located within 500 feet of Link Z's centerline at the solar facility near the Solstice Switch endpoint. Habitable structure counts within 500 feet of the filed routes centerlines range from 2 to 66;*
- *Route 320 parallels existing compatible corridors, including existing transmission lines, public roads and highways, railroads, and apparent property boundaries, for approximately 27.2 percent of its length (the range of alternative routes paralleling existing compatible corridors is 17.3 percent to 48.7 percent);*
- *Route 320 crosses no parks/recreational areas and does not have any parks/recreational areas within 1,000 feet of its centerline;*
- *Route 320 crosses no recorded cultural resource sites (two crossings of recorded cultural resource sites was the highest count among the filed routes);*
- *Route 320 has one recorded cultural resource site within 1,000 feet of its centerline (six recorded cultural resource sites within 1,000 feet of the centerline was the highest count among the filed routes);*
- *Route 320 has no Federal Aviation Administration (FAA)-registered airport with a runway greater than 3,200 feet within 20,000 feet of the centerline (two FAA-registered airports with a runway greater than 3,200 feet within 20,000 feet of the centerline was the highest count among the filed routes);*
- *Route 320 has no FAA-registered airport with a runway of 3,200 feet or less within 10,000 feet of the centerline;*
- *Route 320 has no commercial AM radio transmitters within 10,000 feet of its centerline;*
- *Route 320 has no FM radio transmitters, microwave relay stations, or other similar electronic installations within 2,000 feet of its centerline (four such electronic installations within 2,000 feet of centerline was the highest count among the filed routes);*

- *Route 320 crosses three US or State Highways along its entire length (US or State Highway crossings range from 2 to 3 among the filed routes);*
- *Route 320 crosses thirteen FM roads, county roads or other streets along its entire length (such road or street crossings range from 8 to 19 among the filed routes);*
- *Route 320 has been judged to be feasible from an engineering perspective based on currently known conditions without the benefit of on-the-ground and subsurface surveys, and there are no currently-identifiable engineering constraints that impact this route that cannot be addressed with additional consideration by Oncor and AEP Texas during the engineering and construction process.*

TPWD's Recommended Route

To evaluate the potential impacts to fish and wildlife resources, 17 criteria from Table 7-2 in the EA were used. The criterion TPWD used to evaluate potential impacts to fish and wildlife resources include:

- Length of alternative route;
- Length of route parallel to existing electric transmission lines;
- Length of route parallel to railroads;
- Length of route parallel to existing public roads/highways;
- Length of route across parks/recreational areas;
- Number of parks or recreational areas within 1,000 feet of route centerline;
- Length of route through commercial/industrial areas;
- Length of the route across cropland/hay meadow;
- Length across rangeland pasture;
- Length of route across upland woodlands;
- Length of route across riparian areas;
- Length of route across potential wetlands;
- Number of stream crossings by the route;
- Length of route parallel to streams (within 100 feet);
- Length across lakes or ponds (open waters);
- Number of known rare/unique plant locations within the ROW;
- Length of route through known habitat of endangered or threatened species (as defined in the EA).

TPWD typically recommends that transmission line routes be located adjacent to previously disturbed areas such as existing utility or transportation ROWs and discourages fragmenting habitat or locating in areas that could directly negatively impact wildlife, including listed species. After careful evaluation of the 29 routes

filed with the CCN application, TPWD selected Route 324 as the route having the least-potential to impact fish and wildlife resources. The decision to recommend Route 324 was based primarily on the following factors:

- Route 324 is the 6th shortest route at 47.2 miles in length, with the shortest route being 44.5 miles in length;
- Route 324 parallels 15.1 miles of existing transmission lines and 2.9 miles of existing public roads/highways (32 percent of its total length);
- Route 324 does not cross any parks and there are no additional parks or recreational areas within 1,000 feet of the ROW centerline;
- Route 324 does not cross any upland woodlands (as defined in the EA);
- Route 324 only crosses 2,067 feet of potential wetlands (with the shortest length through potential wetlands being 1,284 feet);
- Route 324 has the 3rd fewest amount of stream crossings at 15 stream crossings (with the fewest stream crossings being 13);
- Only 799 feet of Route 324 parallels (within 100 feet) streams or rivers;
- Route 324 only crosses 80 feet of open water (lakes, ponds);
- Only one known rare/unique plant location is within the ROW of Route 324 (as defined in the EA);
- Only 63 feet of Route 324 crosses known habitat of endangered or threatened species (as defined in the EA).

TPWD notes that Route 324 would cross one Texas Natural Diversity Database (TXNDD) record from July 1943 for Grayleaf rock-daisy (*Perityle cinerea*), which is a rare plant tracked by TPWD.

The EA did not provide sufficient information based on surveys (aerial or field), remote sensing, modeling, or other available analysis techniques to determine which route would best minimize impacts to important, rare, and protected species. Therefore, the routing recommendation below is based solely on the natural resources information provided in the CCN application and the EA, as well as publicly available information examined in Geographic Information Systems (GIS).

Recommendation: Of the routes evaluated in the EA, Alternative Route 324 appears to best minimize adverse impacts to natural resources while also maintaining a shorter route length and paralleling existing corridors for a portion of the route length. TPWD recommends the PUC select a route that would minimize adverse impacts to natural resources, such as Alternative Route 324.

Construction Recommendations

General Construction Recommendations

Recommendation: TPWD recommends the judicious use and placement of sediment control fence to exclude wildlife from the construction area. In many cases, sediment control fence placement for the purposes of controlling erosion and protecting water quality can be modified minimally to also provide the benefit of excluding wildlife access to construction areas. The exclusion fence should be buried at least six inches and be at least 24 inches high. The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed site has been revegetated. Construction personnel should be encouraged to examine the inside of the exclusion area daily to determine if any wildlife species have been trapped inside the area of impact and provide safe egress opportunities prior to initiation of construction activities. TPWD recommends that any open trenches or excavation areas be covered overnight and/or inspected every morning to ensure no wildlife species have been trapped. For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Also, inspect excavation areas for trapped wildlife prior to refilling.

Recommendation: For soil stabilization and/or revegetation of disturbed areas within the proposed project area, TPWD recommends erosion and seed/mulch stabilization materials that avoid entanglement hazards to snakes and other wildlife species. Because the mesh found in many erosion control blankets or mats pose an entanglement hazard to wildlife, TPWD recommends the use of no-till drilling, hydromulching and/or hydroseeding due to a reduced risk to wildlife. If erosion control blankets or mats will be used, the product should contain no netting or contain loosely woven, natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic mesh matting should be avoided.

Federal Law: Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control, except when specifically authorized by the Department of the Interior. This protection applies to most native bird species, including ground nesting species. The U.S. Fish and Wildlife Service (USFWS) Migratory Bird Office can be contacted at (505) 248-7882 for more information on potential impacts to migratory birds.

Section 7.4.2.1 (pages 7-9 and 7-10) of the EA states, "Transmission lines (both structures and wires) could present a hazard to flying birds, particularly migrants, and especially near crossings of water features. Collisions tend to increase in frequency during the fall when migrating flocks are denser and flight altitudes are lower in association with cold air masses, fog, or inclement weather. Studies indicate that higher rates of mortality exist during periods when poor light and weather conditions persist. This is important to note, given that most migratory species will continue to migrate regardless of weather conditions. Overall wire strikes are greatly reduced during bright daylight hours. Species at higher risk for wire strikes are those that fly in fast-moving and/or tight flocks and larger-bodied birds with more awkward flight characteristics. For resident birds or for birds during periods of non-migration, those most prone to collision are often the most common raptors in a given area because of a greater number of repeated flights across power lines particularly when in pursuit of prey. Nevertheless, resident birds and those in an area for an extended period may learn the location of power lines and become less susceptible to wire strikes."

Recommendation: To prevent electrocution of perching birds, TPWD recommends utilizing avian-safe designs that provide appropriate separation between two energized phases or between an energized phase and grounded equipment. TPWD recommends covering energized components with appropriate bird protection materials where adequate spacing cannot be achieved, such as installing insulated jumper wires, insulator covers, bushing caps, and arrester caps. TPWD recommends that lines that cross or are located near rivers, creeks, drainages, wetlands, and lakes have line markers installed at the crossings or closest points to the drainages to reduce potential collisions by birds flying in the vicinity of water features. For additional information, please see the guidelines published in the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*.

Section 7.4.2.1 (page 7-8) of the EA states, "If ROW clearing and construction occurs during the breeding season, impacts may occur to the young of many species including nestling and fledgling birds. Impacts to nesting birds will require mitigating measures to ensure compliance with the Migratory Bird Treaty Act."

Recommendation: If migratory bird species are found nesting on or adjacent to the project area, they must be dealt with in a manner consistent with the MBTA. TPWD recommends excluding vegetation clearing activities during the general bird nesting season, March 15 through September 15, to avoid adverse impacts to breeding birds. If clearing vegetation during the migratory bird nesting season is unavoidable, TPWD recommends surveying the area proposed for disturbance, as close to the date of construction as possible, to

ensure that no nests with eggs or young will be disturbed by operations. TPWD recommends that a 150-foot buffer of vegetation remain around any nests that are observed prior to disturbance. Any vegetation (such as trees, shrubs, and grasses) or other open areas where occupied nests are located should not be disturbed until the eggs have hatched and the young have fledged.

Federal Law: Endangered Species Act

Federally-listed animal species and their habitats are protected from “take” on any property by the Endangered Species Act (ESA). Take of a federally-listed species can be allowed if it is “incidental” to an otherwise lawful activity and must be permitted in accordance with Section 7 or 10 of the ESA. Federally-listed plants are not protected from take except on lands under federal/state jurisdiction or for which a federal/state nexus (i.e., permits or funding) exists. Any take of a federally-listed species or its habitat without the required take permit (or allowance) from the USFWS is a violation of the ESA.

*Pecos sunflower (*Helianthus paradoxus*)*

Section 7.4.1.4 (page 7-7) of the EA states, “The range of one federally-listed threatened plant species, the Pecos sunflower, is known to include Reeves County, including the study area, and habitat for the species may be found in limited capacity in isolated wetland areas within the study area. The TPWD NDD search found one record of occurrence for this species within the study area through which Link D1 crosses. This area is of limited locational certainty, associated with a record of observation from 1970 which noted the species was infrequently dispersed in the immediate area. The preliminary alternative routes minimize crossings of the potential wetlands in the area, few of which may be spring fed, if any, and it is not anticipated that the proposed project would affect this species.”

TPWD’s recommended route (Route 324) does not include Link D1, which would cross a TXNDD record for the Pecos sunflower, as stated above.

Recommendation: TPWD recommends the PUC-selected route be surveyed for the Pecos sunflower where suitable habitat may be present, prior to construction. The survey should be performed by a qualified biologist at the time of year when the species is most likely to be found, usually during the species flowering period. If this species is present, plans should be made to avoid adverse impacts to the greatest extent possible. If plants are found in the path of construction, including the placement of staging areas and other project related sites, this office should be contacted for further coordination and possible salvage of plants and/or seeds for seed banking. Plants not in the

direct path of construction should be protected by markers or fencing and by instructing construction crews to avoid any harm. The USFWS should be contacted for species occurrence data, guidance, permitting, survey protocols, and mitigation for this federally-listed plant.

State Law: Parks and Wildlife Code – Chapter 64, Birds

TPW Code Section 64.002, regarding protection of nongame birds, provides that no person may catch, kill, injure, pursue, or possess a bird that is not a game bird. TPW Code Section 64.003, regarding destroying nests or eggs, provides that, no person may destroy or take the nests, eggs, or young and any wild game bird, wild bird, or wild fowl. TPW Code Chapter 64 does not allow for incidental take and therefore is more restrictive than the MBTA.

Recommendation: Please review the *Federal Law: Migratory Bird Treaty Act* section above for recommendations as they are also applicable for Chapter 64 of the Parks and Wildlife Code compliance.

State Law: Parks and Wildlife Code – Section 68.015

Section 68.015 of the TPW Code regulates state-listed species. Please note that there is no provision for the capture, trap, take, or kill (incidental or otherwise) of state-listed species. *TPWD Guidelines for Protection of State-Listed Species* includes a list of penalties for take of species. State-listed species may only be handled by persons with authorization obtained through TPWD. For more information on this permit, please contact the Wildlife Permits Office at (512) 389-4647.

Texas horned lizard (Phrynosoma cornutum)

As stated in Section 3.5.2.4 (page 3-62) of the EA, “The historical range of the Texas horned lizard included the entire state of Texas in arid and semiarid areas of flat, open terrain with scattered vegetation and sandy or loamy soils. Population declines have been linked to loss of habitat, insecticides, over-collection, and the accidental introduction of the imported fire ant (*Solenopsis invicta*). Despite declines in east and central Texas, the Texas horned lizard is still common in portions of the Rio Grande Plains of south Texas, the Rolling and High Plains of northwest Texas, and the Trans Pecos of far west Texas. It remains possible that the Texas horned lizard could occur in the study area wherever suitable habitat exists.”

Section 7.4.2.4 (page 7-13) of the EA states, “The Texas horned lizard has more limited mobility and could be harmed by the heavy machinery, should they occur

within the ROW of the proposed project. TPWD provides specific recommendations for the state-listed Texas horned lizard, recommending pre-construction surveys for suitable habitat and relocation where individuals are found. Exclusion recommendations to prevent individuals from re-entering the disturbance area are also provided. If suitable habitat cannot be avoided, TPWD further recommends that a permitted biological monitor be present during construction to relocate Texas horned lizards, if found, and to minimize disturbance of harvester ant mounds (the species primary food source) during construction.”

Recommendation: TPWD recommends having a permitted biologist survey the PUC-selected route for any Texas horned lizards that may be in the area that is proposed for disturbance. As previously mentioned, a useful indication that the Texas horned lizard may occupy the site is the presence of harvester ant nests. The survey should be performed during the warm months of the year when the Texas horned lizards are active. If Texas horned lizards are found on-site, TPWD recommends relocating individuals off-site to a nearby area and that contains similar habitat. For projects where the disturbance is linear (county and state roads and highways, pipelines, and transmission lines) and after Texas horned lizard removal, TPWD recommends that fencing be installed to exclude Texas horned lizards and other reptiles from entering the active construction area and project specific locations or staging areas.

The exclusion fence should be constructed and maintained as follows:

- a. The exclusion fence should be constructed with metal flashing or drift fence material.
- b. Rolled erosion control mesh material should not be used.
- c. The exclusion fence should be buried at least 6 inches deep and be at least 24 inches high.
- d. The exclusion fence should be maintained for the life of the project and only removed after the construction is completed and the disturbed site has been revegetated.
- e. Any open trenches or excavation areas should be covered overnight and/or inspected every morning to ensure no Texas horned lizards or other wildlife have been trapped. For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Also, inspect excavation areas for trapped wildlife prior to refilling.

Recommendation: If the PUC-selected route cannot avoid suitable habitat of the Texas horned lizard, then TPWD recommends a permitted biological monitor be present during clearing and construction activities to relocate

Texas horned lizards encountered during construction. TPWD also recommends providing contractor training where feasible. Because the biological monitor cannot oversee all construction activity at the same time, it's important for the contractor to be able to identify protected species and to be on the lookout for them during construction. TPWD also recommends avoiding impacts to harvester ant mounds where feasible. TPWD understands that ant mounds in the direct path of construction would be difficult to avoid, but contractors should be mindful of these areas when deciding where to place project specific locations and other disturbances associated with construction.

If the presence of a biological monitor during construction is not feasible, state-listed threatened species observed during construction should be allowed to safely leave the site or be relocated by a permitted individual to a nearby area with similar habitat that would not be disturbed during construction. TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100 to 200 yards from the initial encounter location. A mixture of cover, food sources, and open ground is important to the Texas horned lizard and the harvester ant. Disturbed areas within suitable habitat for the Texas horned lizard should be re-vegetated with site-specific native, patchy vegetation rather than sod-forming grasses.

Pecos pupfish (*Cyprinodon pecosensis*)

Section 3.5.2.4 (page 3-60) of the EA states, "The Pecos pupfish originally occurred within the entire Pecos River basin. Presently this fish is restricted to the upper basin only. The Pecos pupfish inhabits shallow margins of clear, vegetated spring waters high in calcium carbonate, as well as in sinkhole habitats. Other habitat includes saline springs, gypsum sinkholes, and desert streams. Sometimes this species occurs in low salinity waters, but it is most typical and abundant in highly saline habitats that support relatively few species. This species is documented in NDD records in the Pecos River within the study area, north, and east of the study area. The range of observations extends from 1972 to 1980. Habitat for this observation consists of gravel and bedrock substrate and the presence of spring-fed tributaries. There is potential for the Pecos pupfish to be found within the study area wherever suitable habitat exists."

Proserpine shiner (*Cyprinella proserpina*)

Section 3.5.2.4 (page 3-60) of the EA states, "The Proserpine shiner inhabits the Rio Grande and Pecos River basins in rocky runs and pools of creeks and small rivers. The NDD database includes records of the Proserpine shiner in the Pecos River in the far eastern reach of Pecos County. With the presence of the Pecos

River and other creeks, the Proserpine shiner may be found wherever suitable habitat exists.”

TPWD notes that all of the proposed routes contain one crossing of the Pecos River. Section 7.3.1 (page 7-3) of the EA states, “Any stream that would be crossed by the proposed project would be spanned by the proposed project, and no supporting structures would be placed in any streambed.”

Recommendation: TPWD recommends taking measures to avoid impacts to aquatic and riparian habitats, which would help minimize impacts to the Pecos pupfish and Proserpine shiner (as well as other aquatic species inhabiting the Pecos River). All waterways in the project area should be spanned, and care should be taken to avoid multiple crossings of creeks and rivers or installing lines parallel to waterways and therefore removing large sections of riparian habitat. River and creek crossings should be located in previously disturbed areas to avoid further fragmentation of the riparian corridors associated with these waterways. TPWD also recommends implementing best management practices (BMPs) to prevent erosion and sedimentation into waterways. Erosion and sediment control measures include temporary or permanent seeding (with native plants), mulching, earth dikes, silt fences, sediment traps, and sediment basins. Examples of post-construction BMPs include vegetation systems (biofilters) such as grass filter strips and vegetated swales as well as retention basins capable of treating any additional runoff. Please also refer to the *General Construction Recommendations* section of this letter for erosion and seed/mulch stabilization materials TPWD recommends utilizing and avoiding.

Trans-Pecos black-headed snake (*Tantilla cucullata*)

Section 3.5.2.4 (pages 3-62 and 3-63) of the EA states, “The Trans-Pecos black-headed snake is a small snake with uniform body color and a small, dark head. This secretive species is fossorial and mostly nocturnal. It inhabits predominantly mesquite-creosotebush and pinyon-juniper-oak habitats. The Trans-Pecos black-headed snake lays its eggs from June to August. It eats insects, spiders, and other small invertebrates. The NDD database includes a record for the Trans-Pecos black-headed snake in central Pecos County. There is potential that the Trans-Pecos black-headed snake may be present within the study area wherever suitable habitat exists.”

Recommendation: Snakes are generally perceived as a threat and killed when encountered during clearing or construction. Therefore, TPWD recommends that personnel involved in clearing and construction be informed of the potential for the Trans-Pecos black-headed snake to occur in the project area.

Personnel should be advised to avoid impacts to this snake as it is non-venomous and poses no threat to humans. TPWD recommends a permitted biological monitor be present during construction to try to relocate protected species if found (to an area that is nearby with similar habitat). TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100 to 200 yards from the initial encounter location. If the presence of a permitted biological monitor during construction is not feasible, state-listed species observed during construction should be allowed to safely leave the site.

Rare Species

In addition to state- and federally-protected species, TPWD tracks special features, natural communities, and rare species that are not listed as threatened or endangered. These species and communities are tracked in the TXNDD, and TPWD actively promotes their conservation. TPWD considers it important to evaluate and, if necessary, minimize impacts to rare species and their habitat to reduce the likelihood of endangerment and preclude the need to list as threatened or endangered in the future.

Table 3-3 of the EA lists the following rare plant species as “likely to occur within the study area”:

- Alkali spurge (*Chamaesyce astyla*)
- Bigelow's desert grass (*Blepharidachne bigelovii*)
- Broadpod twistflower (*Streptanthus platycarpus*)
- Bushy wild-buckwheat (*Eriogonum suffruticosum*)
- Cienega false clappia-bush (*Pseudoclappia arenaria*)
- Cory's ephedra (*Ephedra coryi*)
- Desert night-blooming cereus (*Peniocereus greggii* var. *greggii*)
- Dune umbrella-sedge (*Cyperus onerosus*)
- Dwarf broomspurge (*Euphorbia jejuna*)
- Grayleaf rock-daisy (*Perityle cinerea*)
- Gyp locoweed (*Astragalus gypsodes*)
- Havard's trumpets (*Acleisanthes acutifolia*)
- Hawksworth's mistletoe (*Phoradendron hawksworthii*)
- Hinckley's spreadwing (*Eurytaenia hinckleyi*)
- Irion County wild-buckwheat (*Eriogonum nealleyi*)
- Leoncita false foxglove (*Agalinis calycina*)
- Longstalk heimia (*Nesaea longipes*)
- Rayless rock-daisy (*Perityle angustifolia*)

- Warnock's water-willow (*Justicia warnockii*)
- White column cactus (*Escobaria albicolumnaria*)
- Wright's trumpets (*Acleisanthes wrightii*)

Recommendation: TPWD recommends surveying the PUC-selected route for the above-listed species where suitable habitat may be present, prior to construction. The survey should be performed by a qualified biologist at the time of year when the species is most likely to be found, usually during their respective flowering period. If any of these species are present, plans should be made to avoid adverse impacts to the greatest extent possible. If plants are found in the path of construction, including the placement of staging areas and other project related sites, this office should be contacted for further coordination and possible salvage of plants and/or seeds for seed banking. Plants not in the direct path of construction should be protected by markers or fencing and by instructing construction crews to avoid any harm or disturbance.

Black-tailed prairie dog (*Cynomys ludovicianus*)

Section 3.5.2.4 (pages 3-66 and 3-67) of the EA states, "The black-tailed prairie dog inhabits dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle. These mammals live in large family groups. This species is documented in NDD records in scattered locations within the south-central region of the study area. The NDD record includes several communities southeast of the study area, and the grasslands within the study area could provide habitat for the black-tailed prairie dog."

Recommendation: TPWD recommends surveying the PUC-selected route for prairie dog towns or burrows and species that depend on them. If prairie dog towns or burrows are found in the area proposed for disturbance, TPWD recommends avoiding these areas during construction and installing exclusion fence to keep prairie dogs from entering the project area. If prairie dog burrows will be disturbed as a result of the proposed project, TPWD recommends non-harmful exclusion methods be used to encourage the animals to vacate the area prior to disturbance and discourage them from returning to the area during construction. If prairie dogs are encountered on the project site, TPWD recommends contacting a prairie dog relocation specialist. If impacting a portion of a larger colony, time relocation efforts and/or humane removal immediately before construction to discourage recolonization of the project area. Prairie dogs can be encouraged to move away from a project area by mowing overgrown adjacent areas. Conversely, prairie dogs can be discouraged from utilizing areas by not mowing and

allowing grass or other tall vegetation to grow or by scraping all vegetation off the project site and leaving soil exposed.

Western burrowing owl (*Athene cunicularia hypugaea*)

Section 3.5.2.4 (pages 3-64 and 3-65) of the EA states, “The western burrowing owl occurs in the western half of North America. Nesting takes place in warmer temperate and sub-tropical regions from southern California to west Texas and south into Mexico. Typical habitat consists of open grasslands, especially prairie, plains, and savanna. Sometimes the burrowing owl is found in open areas such as vacant lots near human habitation or airports. Preferred habitat is typified by shorter vegetation accompanied by abandoned small mammal burrows, which the owl modifies for its own use. This species rarely creates its own burrows, and is thus associated with known habitat for prairie dog, ground squirrel, fox, and similar ground-dwelling mammals. Species decline is primarily due to habitat loss and fragmentation. Due to the presence of prairie and plains, the western burrowing owl could occur within the study area.”

Recommendation: As previously mentioned, TPWD recommends surveying the PUC-selected route for prairie dog or other mammal burrows prior to construction. If mammal burrows or other suitable habitat would be disturbed as a result of the proposed project, TPWD recommends they be surveyed for burrowing owls. If nesting owls are found, disturbance should be avoided until the eggs have hatched and the young have fledged.

Table 3-14 of the EA lists the following rare bat species as “likely to occur within the study area”:

- Cave myotis bat (*Myotis velifer*)
- Big free-tailed bat (*Nyctinomops macrotis*)
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*)
- Pale Townsend’s big-eared bat (*Corynorhinus townsendii pallescens*)

Adverse impacts, such as habitat loss, to bats are being compounded due to a deadly disease known as white-nose syndrome (WNS). This disease is associated with the fungus, *Pseudogymnoascus destructans*, which appears to impact certain species of hibernating bats and frequently results in death of the infected bats. This fungus has wiped out entire colonies of hibernating bats in states east of Texas. As of April 2018, the fungus that causes WNS has been detected in ten Texas Counties. Bats appear to spread WNS among colonies and roosts; however there is evidence that humans can transport the fungus on their shoes, gear, and clothing after entering infected bat caves and roosts. TPWD is concerned that

Ms. Karen Hubbard
Page 16 of 19
January 11, 2018

WNS could be spread by personnel or consultants working on development projects in states where WNS has been detected, and then inadvertently bring the fungus to Texas on gear or clothing that has not been properly decontaminated.

To determine the appropriate BMP to avoid or minimize impacts to bats, review the habitat descriptions for the above-listed species on the TPWD Rare, Threatened, and Endangered Species of Texas by County List or other trusted resources. All bat surveys and other activities that include direct contact with bats shall comply with TPWD-recommended white-nose syndrome protocols located on the TPWD Wildlife Habitat Assessment Program website under "Project Design and Construction."

The following survey and exclusion protocols should be followed prior to commencement of construction activities. For the purposes of this letter, structures are defined as bridges, culverts (concrete or metal), wells, and buildings. For activities that have the potential to impact structures, cliffs or caves, or trees; a qualified biologist should perform a habitat assessment and occupancy survey of the feature(s) with roost potential as early in the planning process as possible or within one year before construction is scheduled to begin.

Recommendation: TPWD recommends surveying the PUC-selected route for potential bat habitat. Surveys should be conducted by a qualified biologist to determine roost site potential and occupancy. Bat surveys of structures/features should include visual inspections for the presence of bats. If bats are present or recent signs of occupation (i.e., piles of guano, distinct musky odor, or staining and rub marks at potential entry points) are observed, take appropriate measures to ensure that bats are not harmed, such as implementing non-lethal exclusion activities or timing or phasing of construction. For roosts where occupancy is strongly suspected but unconfirmed during the initial survey, revisit feature(s) at most four weeks prior to scheduled disturbance to confirm absence of bats.

Recommendation: For exclusion of bats, TPWD recommends locating and sealing the entrances through which bats make ingress/egress. Before excluding bats from any occupied structure/feature, bat species, weather, temperature, season, and geographic location must be incorporated into any exclusion plans to avoid unnecessary harm or death to bats. Winter exclusion must entail a survey to confirm either, 1) bats are absent or 2) present but active (i.e. continuously active – not intermittently active due to arousals from hibernation). Prior to exclusion, ensure that alternate roosting habitat is available in the immediate area. If no suitable roosting habitat is available, install alternate roosts to mitigate for the loss of an occupied roost. If alternate

roost sites are not provided, bats may seek shelter in other inappropriate sites, such as buildings, in the surrounding area.

Exclusion devices can be installed by a qualified individual between September 1 and March 31. Exclusion devices should be used for a minimum of seven days when minimum nighttime temperatures are above 50°F and minimum daytime temperatures are above 70°F. TPWD offers the following best-practices regarding bat exclusion devices and activities:

- Avoid using materials that degrade quickly, like paper, steel wool or rags, to close holes.
- Avoid using products or making structural modifications that may block natural ventilation, like hanging plastic sheeting over an active roost entrance, thereby altering roost microclimate.
- Avoid using chemical and ultrasonic repellents
- Avoid use of silicone, polyurethane or similar non-water-based caulk products.
- Avoid use of expandable foam products at occupied sites
- Avoid the use of flexible netting attached with duct tape.
- In order to avoid entombing bats, exclusion activities should be only implemented by a qualified individual. A qualified individual or company should possess at least the following minimum qualifications:
 - Experience in bat exclusion (the individual, not just the company).
 - Proof of rabies pre-exposure vaccinations.
 - Demonstrated knowledge of the relevant bat species, including maternity season date range and habitat requirements.
 - Demonstrated knowledge of rabies and histoplasmosis in relation to bat roosts.
- Contact TPWD for additional resources and information to assist in executing successful bat exclusions that will avoid unnecessary harm or death in bats.

Spot-tailed earless lizard (*Holbrookia lacerata*)

Section 3.5.2.4 (pages 3-68 and 3-69) of the EA states “The spot-tailed earless lizard is found in central and southern Texas and adjacent Mexico. This lizard inhabits moderately open brushland. It prefers relatively flat areas free of vegetation or other obstructions, including disturbed areas. Given the predominance of brushland in the study area, it is possible for the spot-tailed

earless lizard to occur within the study area. This species is documented in NDD records in Ward County near the City of Pyote, 3 miles east of the study area. A specimen was collected in 1967 but a 2009 survey at the location did not identify any individuals. There is potential for the spot-tailed earless lizard to be found wherever suitable habitat exists.”

Recommendation: TPWD recommends monitoring the listing status of the spot-tailed earless lizard throughout project planning and construction and perform required consultation, permitting, and mitigation with the USFWS if this species becomes listed under the ESA. TPWD recommends a biological monitor be present during construction to relocate spot-tailed earless lizards, if found. If the presence of a biological monitor during construction is not feasible, species observed during construction should be allowed to safely leave the site or be relocated to a nearby area with similar habitat that would not be disturbed during construction. As previously mentioned, TPWD recommends that any translocations of reptiles be the minimum distance possible no greater than one mile, preferably within 100 to 200 yards from the initial encounter location.

Texas Natural Diversity Database

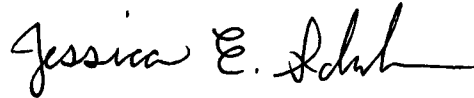
The TXNDD is intended to assist users in avoiding harm to rare species or significant ecological features. Given the small proportion of public versus private land in Texas, the TXNDD does not include a representative inventory of rare resources in the state. Absence of information in the database does not imply that a species is absent from that area. Although it is based on the best data available to TPWD regarding rare species, the data from the TXNDD do not provide a definitive statement as to the presence, absence or condition of special species, natural communities, or other significant features within your project area. These data are not inclusive and **cannot be used as presence/absence data**. They represent species that could potentially be in your project area. This information cannot be substituted for field surveys. The TXNDD is updated continuously based on new, updated and undigitized records; therefore, TPWD recommends requesting the most recent TXNDD data on a regular basis. For questions regarding a record or to request the most recent data, please contact TexasNatural.DiversityDatabase@tpwd.texas.gov.

Recommendation: To aid in the scientific knowledge of a species’ status and current range, TPWD encourages reporting all encounters of rare, state-listed, and federally-listed species to the TXNDD according to the data submittal instructions found on the TXNDD website.

Ms. Karen Hubbard
Page 19 of 19
January 11, 2018

I appreciate the opportunity to review and comment on this EA. Please contact me at (512) 389-8054 or Jessica.Schmerler@tpwd.texas.gov if you have any questions.

Sincerely,

A handwritten signature in black ink, reading "Jessica E. Schmerler". The signature is fluid and cursive, with the first name "Jessica" being the most prominent.

Jessica E. Schmerler
Wildlife Habitat Assessment Program
Wildlife Division

JES:jn.40999

cc: Mr. Chris Reily
Regulatory Project Manager
Oncor Electric Delivery Company, LLC
1616 Woodall Rodgers Fwy
Suite 6A-010
Dallas, TX 75202